

Transilvania University of Braşov, Romania

Study program: Electrotechnics

Faculty: Faculty of Electrical Engineering and Computer Science

Study period: 4 years (bachelor)

Academic year structure: 2 semesters (14 weeks per semester)

Examination sessions (two): winter session (January/February)

summer session (June/July)

Courses per years (C= course; S = seminar; L = laboratory; P = project)

1st Year

No. crt.	Course	Code	1 st Semester					2 nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Mathematical Analysis	ET101	3	2			6					
02	Linear Algebra, Differential Geometry	ET102	3	2			6					
03	Computer Programming and Programming Languages I	ET103	2		2		4					
04	Physics I	ET104	1	1			3					
05	Chemistry	ET105	2		1		3					
06	Technological Methods and Procedures	ET106	2		1		3					
07	Communication	ET107	1	2			3					
08	Foreign Languages I	ET108	1	1			2					
09	Sport Activities I	ET109		1			1					
10	Special Mathematics	ET210						3	2			6
11	Computer Programming and Programming Languages II	ET211						2		2		5
12	Computer Aided Graphics	ET212						1		2		3
13	Physics II	ET213						3		1		5
14	Electrical Circuit Theory	ET214						2	3	1		6
15	Elements of Mechanics Engineering I	ET215						2	1			3
16	Foreign Languages II	ET216						1	1			2
17	Sport Activities II	ET217							1			1

2nd Year

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Numerical Methods	ET301	1		2		4					
02	Computer Programming and Programming Languages III	ET302	1		2	1	4					
03	Electromagnetic Field Theory	ET303	2	3			6					
04	Electrotechnics Materials	ET304	2		2		4					
05	Analog Electronics	ET305	2	1	1		4					
06	Digital Electronics	ET306	2		1		4					

07	Elements of Mechanical - Engineering II	ET307	1		1		2					
08	Foreign Languages III	ET308	1	1			2					
09	Sport Activities III	ET309		1			1					
10	Microprocessors Systems	ET410					2		1			3
11	Energy Sources	ET411					2		1			3
12	Electrical and Electronic Measurements	ET412					2		2	1		4
13	Electromagnetic Converters I	ET413					2		2			5
14	Electrical Equipments	ET414					3		3			5
15	System Theory and Control	ET415					2	1	1			4
16	Foreign Languages IV	ET416					1	1				2
17	Sport Activities IV	ET417						1				1
18	Practice I (90 hours/year)	ET418										4

3rd Year

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Microcontroller Programming	ET501	2		2		5					
02	Sensors and Transducers	ET502	2		1		3					
03	Electromagnetic Converters II	ET503	2		2	1	5					
04	Static Converters	ET504	2		3	1	4					
05	Project- Static Converters	ET505				1	2					
06	Production, Transmission and Distribution of Electric Energy	ET506	2		1	1	4					
07	Accounting Fundamentals	ET607						2	1			3
08	Programmable Logic Controllers	ET608						2		2		3
09	Data Acquisition	ET609						2		1	1	4
10	Frequency Converters	ET610						2		2		4
11	Electrical Drives I	ET611						2		2		4
12	Practice II (90 hours/year)	ET612										4
13	Protection of Electrical Installations	ET513	2		1	1	4					
14	Thermotechnics	ET514	2		1	1	4					
15	Storage Energy Systems	ET515	2		1		3					
16	Electrical Domestic Appliances	ET516	2		1		3					
17	Sound Synthesis and Audio Files	ET617						2		2		4
18	Image Processing for Electrotechnics	ET618						2		2		4
19	Electric Lighting	ET619						2		1	1	4
20	CAD for Electrical Installations (Autocad, Cadelec)	ET620						2		1	1	4

4th Year

No. crt.	Course	Code	7 th Semester					8 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Industrial Control using Computers	ET701	2		2		5					
02	Fundamentals of Modeling, Designing & Testing Electrical Systems	ET702	2		3	1	5					
03	Electrical Drives II	ET703	2		1	1	5					
04	Electrical Installations	ET704	2		2	1	5					

05	Electromagnetic Compatibility	ET705	3		2		5					
06	Fundamentals of Electrical Systems Optimization	ET806						2		2		4
07	Traction/Electrical Vehicles	ET807						2		2		4
08	Statistics and Reliability	ET808						2		2		3
09	Entrepreneurship	ET809						2	1			2
10	Diploma project elaborating (6 hours x 10 weeks=60hours)	ET810										4
11	Practice III (for elaborating the diploma project, 60 hours/year)	ET711										6
12	Energy and Environment	ET712	2		2		5					
13	Electrosecurity	ET813	2		2		5					
14	Automotive Electrical Equipment	ET814						2		3	1	4
15	Energy Efficiency in Electrical Energy Systems	ET815						2		3	1	4
16	Micro and Nanotechnology	ET816						2		2		3
17	Power Supply of Industrial Consumers	ET817						2		2		3